

## **Kūlia I Ka Nu'u: Evaluating Usability of a Financial Aid and Scholarship Resource Website for Native Hawaiian College Students**

Terri Lyn K. Saragosa  
University of Hawai'i at Manoa  
Honolulu, Hawaii, USA  
tks@hawaii.edu  
[www.finaidresources.weebly.com](http://www.finaidresources.weebly.com)

**Abstract:** As college costs continue to rise, financial aid has increased in importance in helping students pursue higher education. Financial aid is a significant predictive variable for Native Hawaiian student persistence in college. Without it, many students would not be able to complete their degree. However, many learners lack accurate information about financial aid and resources. To address this need, the purpose of this usability study was to develop and evaluate the ease of use and effectiveness of a website designed to inform Native Hawaiian College students about financial aid and scholarship basics and resources ([www.finaidresources.weebly.com](http://www.finaidresources.weebly.com)). The researcher designed the website prototype, incorporating the principles of instructional design and multimedia learning. Two rounds of usability testing were conducted to evaluate the ease of use and effectiveness of the site. Testing was done synchronously through Google Hangout or in-person with participants “thinking aloud” as they explored the site and completed given tasks. Additional feedback was captured through a post-study survey and interview. Data analysis included task success rates and quantitative and qualitative user feedback. Usability issues were identified, and changes were implemented between rounds based on the data. Feedback indicated that visually appealing graphics, clear and concise labels and a simple clean layout was preferred by users. Revisions made between rounds contributed to increased user ratings. Data supported that usability testing can contribute to an improvement in user satisfaction resulting in a website that is easier to use and more effective in sharing information with the target population.

### **Introduction**

One of the major barriers to higher education is cost. In 2012-2013, the average yearly cost of attendance for first-time, full-time undergraduate students ranged from \$13,280 (2-year public institutions) to \$30,190 (4-year private schools) (Kena, et al., 2014). As college costs continue to rise, financial aid has become more important in helping students to succeed in college. In 2012-2013, total student aid topped \$238.5 billion of which \$170 billion was federal student aid (Baum & Payea, 2013). Unfortunately, sometimes students do not take advantage of the opportunities available because of limited awareness of the financial aid process and inadequate knowledge of available financial aid and scholarship resources.

Lack of financial aid awareness and access to resources have been identified as barriers “as many students lack accurate information about higher education costs and financial aid” (Long, 2010, p.53). In a study conducted with Native Hawaiian students, financial aid was found to be a significant predictive variable for student persistence, more so because of the general lower socioeconomic status of Hawaiians in Hawaii (Makuakane-Drechsel & Hagedorn, 2000).

For many, the dream of a college education can be a stepping stone on a lifelong path to a brighter future. However, the goal might seem unreachable because of financial difficulty. Many Native Hawaiians, in particular, are unaware of the vast array of resources that exist to help them on their way. This website is intended to bridge that gap and help connect them to those resources.

Therefore, the purpose of this usability study is to develop and evaluate the ease of use and effectiveness of a website designed to inform Native Hawaiian College Students about Financial Aid and Scholarship Basics and Resources. The goal is to provide a user-friendly financial aid and scholarship resource that will allow students anytime, anywhere access to help facilitate student awareness, guide them through the financial aid process and ultimately, lead to increased funding for their education.

## **Literature Review**

College students who use online learning and web-based technologies have increased student engagement and greater learning outcomes. Minority and part-time students, in particular, were found to be more likely to engage in online learning (Chen, Lambert, & Guidry, 2010). In order to incorporate technology into student learning of financial aid, an online resource website was chosen as the vehicle to effectively deliver the information to the target population.

Principles of instructional design and the ADDIE process guided the development of the website. The cognitive theory of multimedia learning and Mayer Multimedia Principles (Mayer, 2005) were also incorporated into the design. Based on this theory, multimedia messages should be designed to enhance active processing. Because the human mind has finite cognitive processing capacities, limiting cognitive load in multimedia design is an effective strategy that will lead to more meaningful learning. Breaking up content into segments, providing multiple modes of learning, and including relevant text and visuals on the website help viewers engage and learn the content.

Websites should be designed to be “user friendly”, making them easy to use and understand (Rosen & Purinton, 2004). When developing a website, it is also important to use a systematic and user-centered approach (McGillis & Toms, 2001), based on target users’ behaviors and always keeping target users in mind (Handa & Hui, 2010). When designing, Steve Krug’s first law of usability which is simply, “Don’t make me think!” (Krug, 2006, p. 11) suggests that everything on the webpage should be obvious and self-explanatory. Users should be able to know what it is and how to use it without having to think about it.

The best-known definition of usability is the one from the International Organization for Standardization (ISO): “The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.” But usability testing can also be simply described as the activity that “focuses on observing users working with a product, performing tasks that are real and meaningful to them (Barnum, 2010). When something is truly usable, “the user can do what he or she wants to do the way he or she expects to be able to do it, without hindrance, hesitation or questions” (Rubin & Chisnell, 2008, p. 4). Website usability has increased in importance as more attention is placed on a user’s ability to successfully negotiate a web site rather than solely on the technology of site-building (McGillis & Toms, 2001).

“Usability testing is one of the best things people can do to improve Web sites (Krug, 2009, p. 3). By conducting a usability study on the site to identify user issues, revisions can be made to improve user experience, increasing engagement and learning by viewers. Studies have also shown that majority of usability problems are identified with four or five subjects (Nielsen, 2012; Virzi, 1992).

Usability studies can be used for formative and summative testing. For this study, the testing was primarily formative assessment using a concurrent think-aloud protocol to resemble unaided user behavior to gain better insight into the user experience (Bergstrom, 2013; Olmsted-Hawala, Murphy, Hawala, & Ashenfelter, 2010). Findings allowed revisions to be made while in development to result in a more user-friendly final product. Usability testing used throughout an iterative design process helps to create an effective website resulting in a quality experience by the user. The goal was to make revisions to the website so that it works well and can be used for its intended purpose without frustration.

## **Project Design**

Prior to conducting the usability study, the researcher designed and created the website prototype on a free website builder, Weebly.com. Ocular reconnaissance (Meggs, 1992) was used by viewing similar websites for relevant design ideas and approaches. To identify which resources and information to include, the researcher collected recommendations from subject matter experts which included college financial aid representatives and post-high counselors who work with Native Hawaiian students.

Because the target population included Native Hawaiian students, the researcher used ‘olelo no‘eau or Hawaiian proverbs along with a nature theme to include a cultural perspective on the website. The proverbs, along with the meanings, are displayed as headings on the different segments of the site with graphics of Native Hawaiian plants (Appendix A).

The researcher used various types of strategies to engage the learner using existing resources and self-created learning objects. The researcher created a slideshow, infographics, and a video presentation (Appendix B). Existing resources were curated

and annotated on the site and included videos and resources from well-respected financial aid and scholarship websites (Appendix C). A self-assessment quiz and discussion board were also created to increase user engagement (Appendix D).

Prior to the usability study, an informal formative assessment was conducted to gain feedback to identify appropriate revisions to create an acceptable prototype. The prototype is located at [www.finaidresources.weebly.com](http://www.finaidresources.weebly.com).

For the usability study, the researcher developed protocol and instruments to identify issues in the areas of ease of use and effectiveness as the study is focused on evaluating and improving these aspects of the site. Google Docs was the chosen tool used for the consent forms and survey items as it's free and easy to use format can disseminate and collect data in an organized manner. Tools to run the remote usability sessions included BB Flashback Express and Google Hangouts. These were selected because they are available at no cost and were easy to use for both researcher and participants.

## **Methods**

### *Research Questions*

There were two research questions for this study. First, how do Native Hawaiian college students rate the ease of use in completing the tasks requested during the usability test of the resource website? Second, how do Native Hawaiian college students rate the effectiveness of the resource website? The objective of the testing was to identify issues in these focus areas that could be improved to better the website for users.

### *Participants*

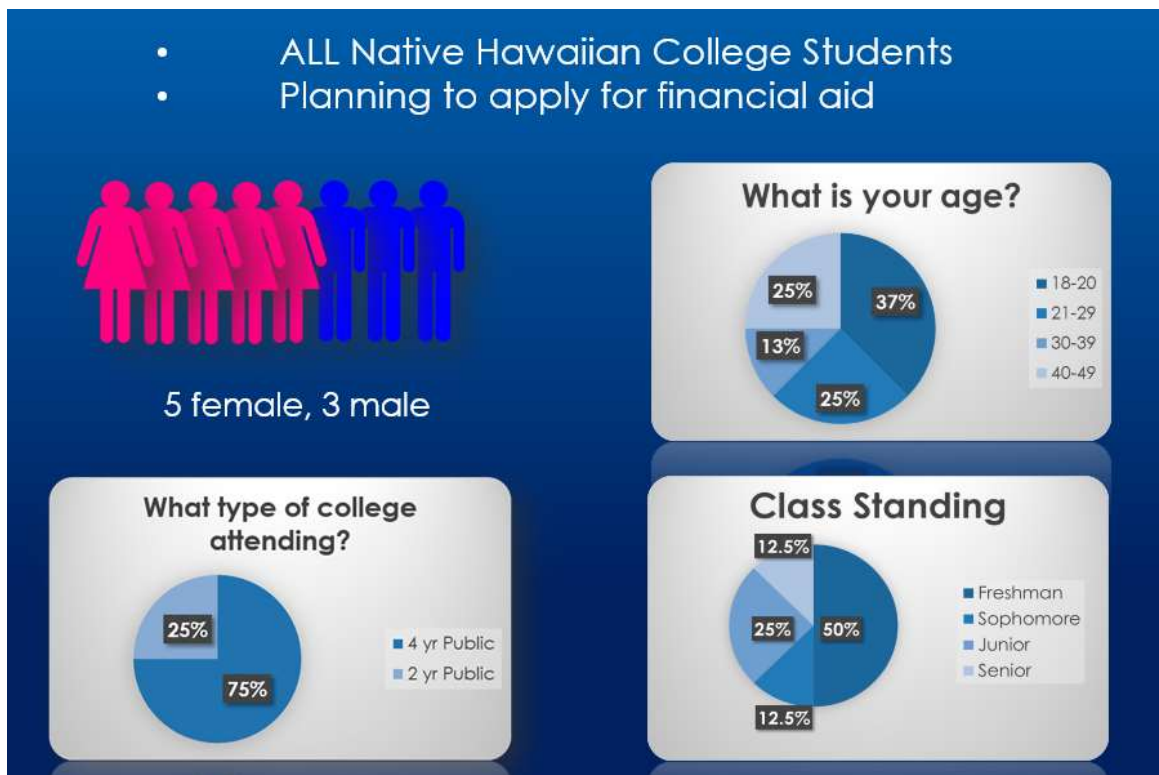
The target population for this project was adult college students of Native Hawaiian ancestry. The learners were degree seeking students, pursuing a variety of majors. They were a diverse group varying in age, socioeconomic level and technological ability.

For recruitment, Native Hawaiian college students were emailed a flyer (Appendix E) providing information on the study and providing a link to a Google Form to collect pre-study information from interested students (Appendix F). To meet the minimum criteria to qualify for the study, participants needed to be adult Native Hawaiian college students who intended to apply for financial aid for the next academic year. Those who indicated interest and met the minimum requirements were contacted for further discussion and to set up a testing schedule.

Two rounds of testing were conducted, with 4 participants per cycle. Research has shown that four or five subjects will detect the majority of usability problems (Nielsen, 2012; Rubin & Chisnell, 2008; Virzi, 1992). Additional subjects were found to be less likely to reveal new information or identify new usability issues.

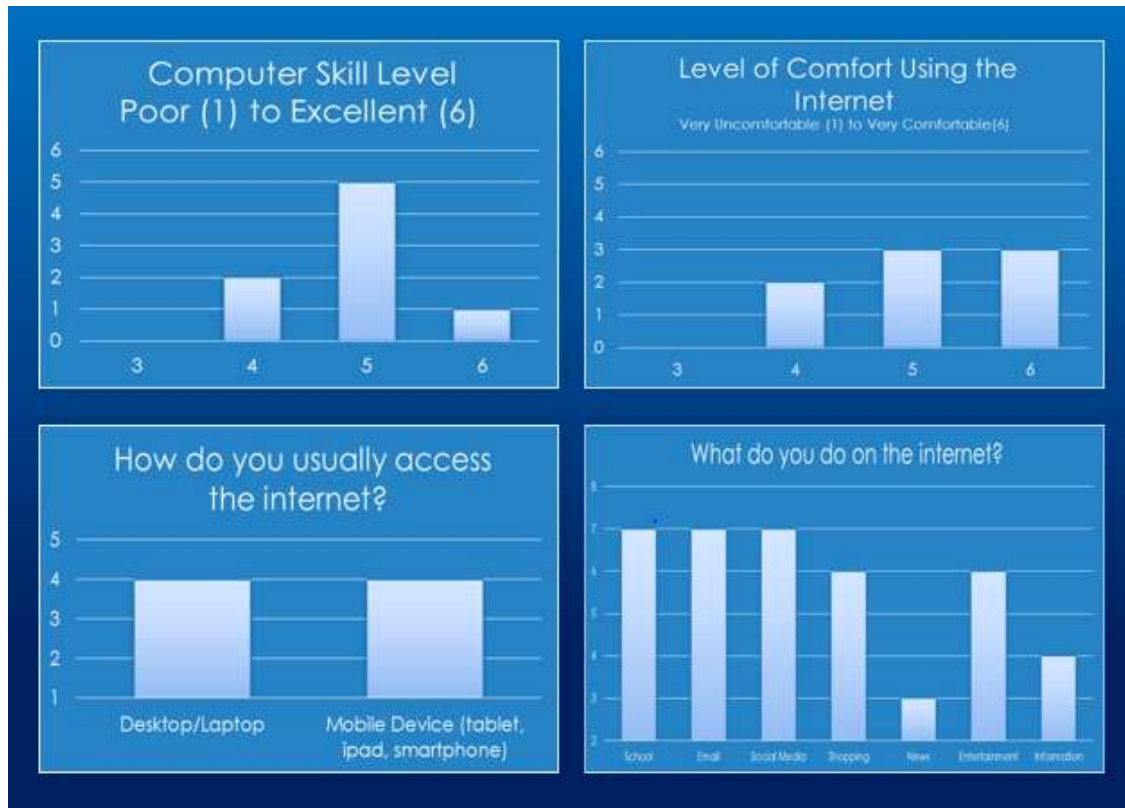
### *Demographics*

The participant pool consisted of five females and three males of various age groups. All were Native Hawaiian adult college students who were receiving some form of financial aid at the time and planning to apply for aid the next school year. They all attended public universities and although the largest number were freshmen, other class standings were represented (Figure 1).



**Figure 1.** Participant Demographics

All of the students indicated they had “good” to “excellent” computer skills, used the internet daily and were at least “comfortable” using the internet. Participants used both mobile and desktop/laptop devices equally to access the internet for various reasons with the top choices being school, email and social media (Figure 2).



**Figure 2.** Participant Technology Use

### *Procedures*

The researcher conducted the sessions in two formats, online remotely or in-person, to accommodate the wide diversity of the population. Participants with a lower level of comfort or skill with technology could opt for the in-person session. For in-person testing, subjects were provided with a laptop computer with internet connection to access the website. For the remote testing, participants used their own computers to join a Google Hangout and shared their computer screen during the testing so the researcher could view and record the session. The participants were asked to talk aloud while they completed a set of tasks and their comments and computer screens were recorded using BB Flashback Express. Although their audio and computer screens were recorded, the images of the participants themselves were not captured to keep their identity confidential, as it was not required for the study. Three chose to do the study in-person with the researcher, while five selected the online remote option.

The researcher gave each participant the required informed consent form (Appendix G) prior to beginning the study, which included detailed information of procedures, risks and protocols. Consent to participate and audio recording was required to complete the study. Data collected were used solely for the purpose of this usability study. Names or any other personal identifying information were not used when reporting the results. Once the

research was complete, all recordings were destroyed. Participants also completed a Google Form pre-study survey (Appendix H) to collect relevant demographic data.

Once consent was received and survey completed, the researcher followed a specific usability protocol (Appendix I) to ensure consistency for the study. Participants were given five task-based scenarios: (1) Navigate website homepage; (2) locate proper link to access information on types of financial aid; (3) find information on the how to apply for federal financial aid; (4) find basic financial aid terms that are important to know, and (5) find scholarship information and 3 scholarships you can apply for.

The Concurrent Think Aloud (CTA) and Retrospective Probing (RP) moderation techniques were used during the study (Bergstrom, 2013). Participants navigated through the resource website and were asked to “think aloud” as they complete the requested tasks to give real-time feedback and any thoughts or feelings while their on-screen actions and verbal comments were recorded. Retrospective probing was used when researcher identified comments or actions that needed follow up at the end of the session.

After the session, researcher administered a post-study user survey (Appendix J) through Google Forms, to collect quantitative and qualitative data on user satisfaction. Quantitative questions used a six-point Likert scale to measure user perception in four categories: design layout, navigation, ease of use and effectiveness. The researcher developed questions based on examples garnered from various research sources (Barnum, 2010; Krug, 2009; Rubin & Chisnell, 2008). This preference data were analyzed using a mean rating and comparing responses between test rounds. Qualitative data was garnered using open-ended questions in the survey.

Performance data collected included success or failure at task completion. Based on the data, the task success rate was calculated and results between the two rounds were compared to see what changes occurred.

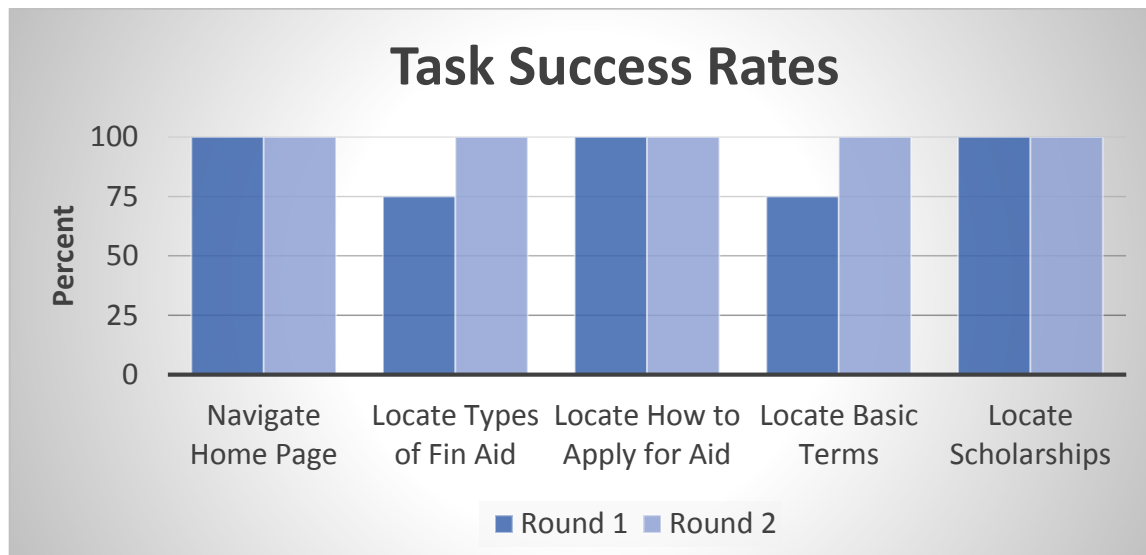
To conclude the test, the researcher ended with a short interview which included retrospective probing as needed. The recording of the actions in conjunction with the insight gained from the follow up questions and interview provided a deeper understanding of the user experience and identified meaningful revisions to the website. For each participant, the entire usability study lasted about 30-45 minutes.

Based on data from the first round of testing, the most significant issues were identified by looking at frequency of occurrence, impact on user experience, and user satisfaction. The researcher then made selected revisions to the website for the second round of testing. By comparing the results from the second round to the first round, it was concluded that an improvement was seen in the ease of use and effectiveness of the website.

## Results

### *Task Success Rate*

To measure effectiveness of the site, the researcher calculated the rate that users were able to complete 5 task-based scenarios. For round one, all participants completed tasks 1, 3 and 5 successfully. Tasks 2 and 4 each had one unique user out of 4 who did not fully complete the task for a success rate of 75%. The primary reason for not completing the task was that the participant stated they were finished, but had only accessed part of the information. For the second round of testing, the success rate increased to 100% as all participants completed all tasks correctly (Figure 3).



**Figure 3.** Task Success Rates, Round 1 vs. Round 2

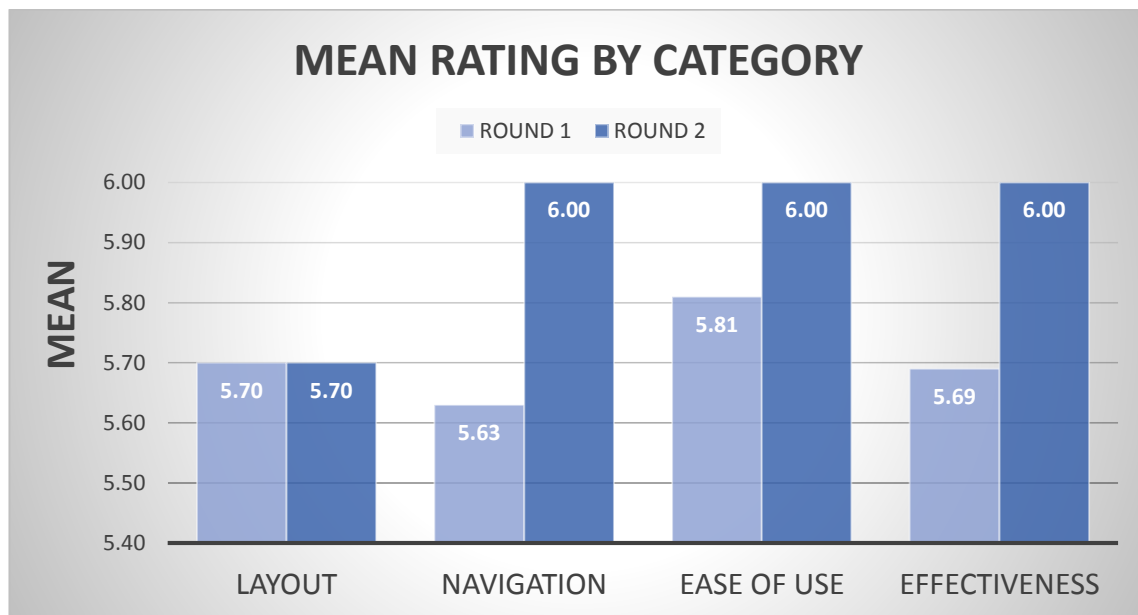
### *Post-Study Survey*

Participants completed a Google Form post-study survey consisting of quantitative questions to measure user perception in four categories: design layout, navigation, ease of use and effectiveness. A six-point Likert scale, with six being the most favorable, was used to analyze and report findings with a mean rating. Four to five questions were asked in each domain with a final section on overall experience in each.

The first round of users garnered a mean score of 5.70 in questions related to layout of the website, 5.81 in the ease of use questions, and 5.69 in questions regarding effectiveness. Navigation questions held the lowest rating at 5.63.

In the second round, the mean ratings for layout remained at 5.70. Navigation, ease of use and effectiveness questions all showed increases to a mean of 6. The mean ratings for layout and ease of use remained the same at 5.75 and 6 respectively. All mean ratings either improved or remained the same (Figure 4).





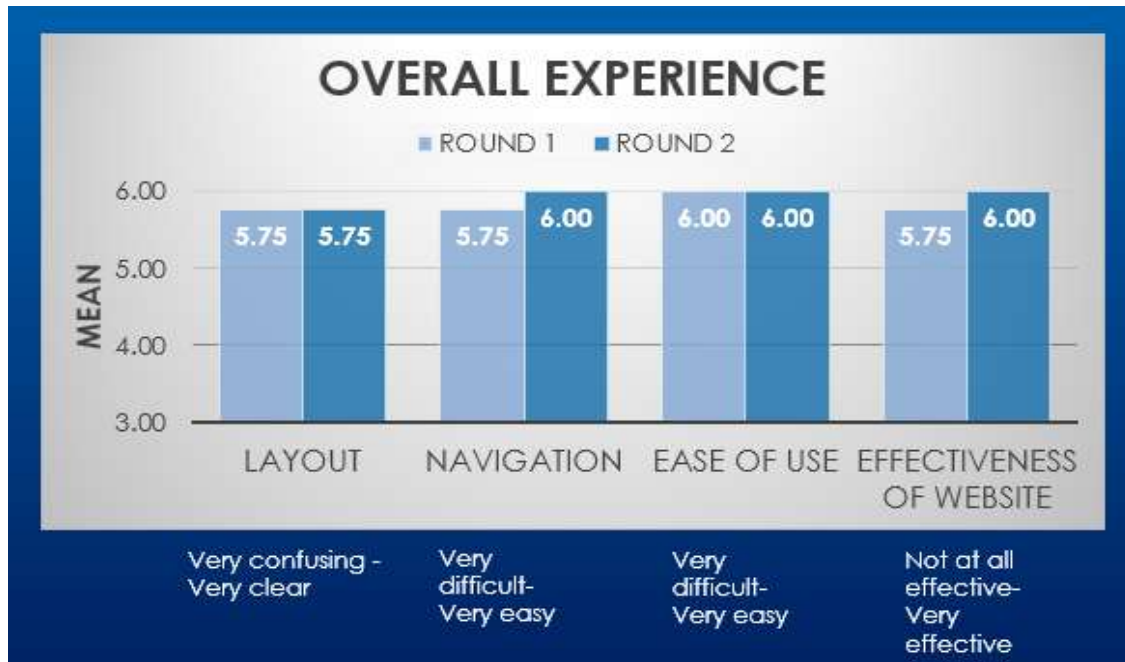
**Figure 4.** Mean Ratings by Category, Round 1 vs. Round 2

Navigation, ease of use and effectiveness ratings increased between rounds as hoped. Layout ratings remained constant. This may be due to users' personal preferences in design and layout style. Although, majority had positive comments such as "I like the clean layout" and "It's clean and neat" were the majority, one user in the second round suggested he preferred "more sidebar images."

In the last section of the post-study survey, users were asked to rate each category as a whole in overall experience. One question per category was given as users were asked to give a final overall rating for each; layout from very confusing to very clear; navigation from very difficult to very easy; ease of use from very difficult to very easy; and effectiveness from not at all effective to very effective.

In round 1, overall experience in layout, navigation and effectiveness resulted in a mean rating of 5.75. Overall experience in ease of use resulted in a mean rating was 6.

For second round testing, the mean rating for overall experience for layout remained the same. The mean for navigation and effectiveness increased .25 to a mean of 6. Ease of use mean continued at 6 (Figure 5).



**Figure 5.** Mean Ratings Comparison – Overall Experience, Round 1 vs. Round 2

### *Qualitative Results*

Qualitative responses were collected throughout the testing process. They included recorded comments made during testing, open-ended questions in the post-test survey and comments made during the short post-test interviews. The data was reviewed, transcribed and grouped into the three categories: layout, navigation/ease of use and effectiveness. Common themes emerged that helped to identify usability issues and revisions to make between rounds.

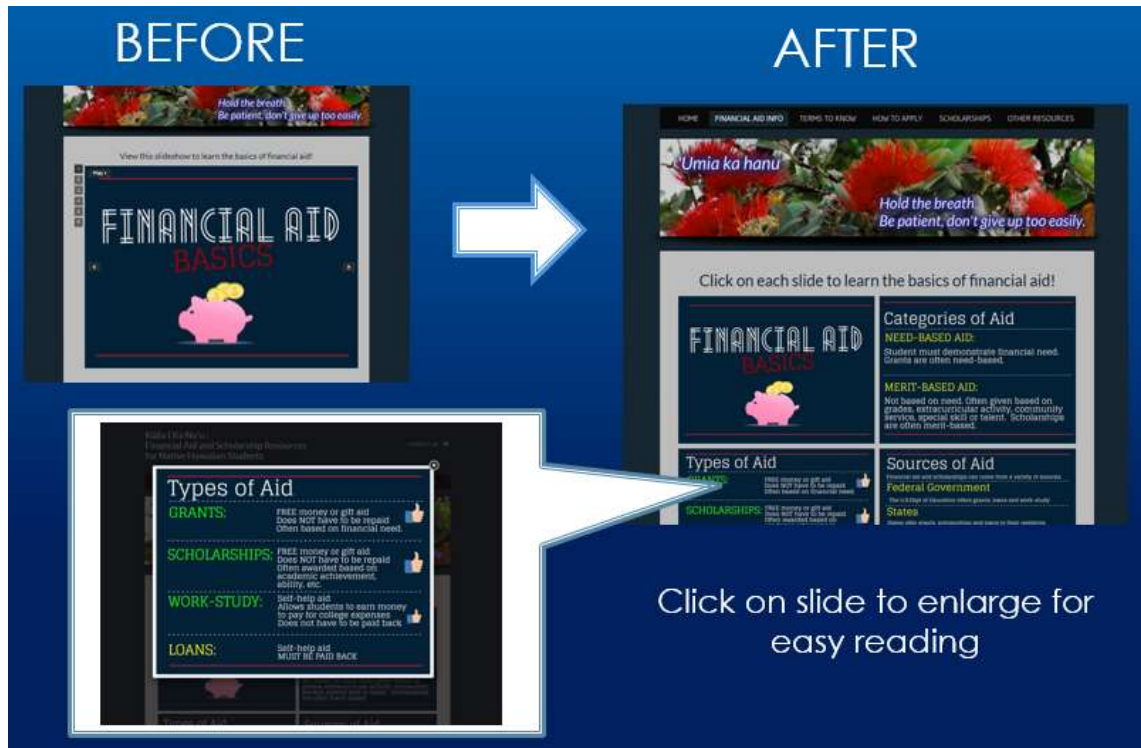
Helpful comments in the area of layout were suggested changes to the infographics and text to improve flow and clarity. Navigation and ease of use comments included: “Some of these links don’t work” and “How do you stop the slideshow?” and targeted important usability issues. Concerns verbalized that addressed effectiveness included suggestions of increasing handout size and making scholarship eligibility text bold to stand out. Representative positive feedback included “It’s simple and easy to understand,” “It’s easy to read,” “The pictures and quotes are attractive,” and “I wish I had this before!”

### *Revisions*

When selecting revisions to make between rounds, the recommendation is to make the least amount of changes to address the most significant issues (Krug, 2009). Based on first round data, the researcher identified issues and revisions to make before the second round of testing. The first revisions addressed navigation and ease of use of the site. Broken links were a source of frustration to users. The links were updated and

highlighted the importance of checking website links periodically to be sure all are current.

Revisions to the layout to increase effectiveness included changing the tab name from “FIN AID BASICS” to “FINANCIAL AID INFO” to make section content more obvious. The slide show advanced automatically, not leaving enough time for users to read the whole slide. Even though it could be paused, it did not seem intuitive to users. Unable to make timing longer in Weebly, the researcher changed the format to a photo gallery where users can click on the individual slides to read at their own pace (Figure 6).



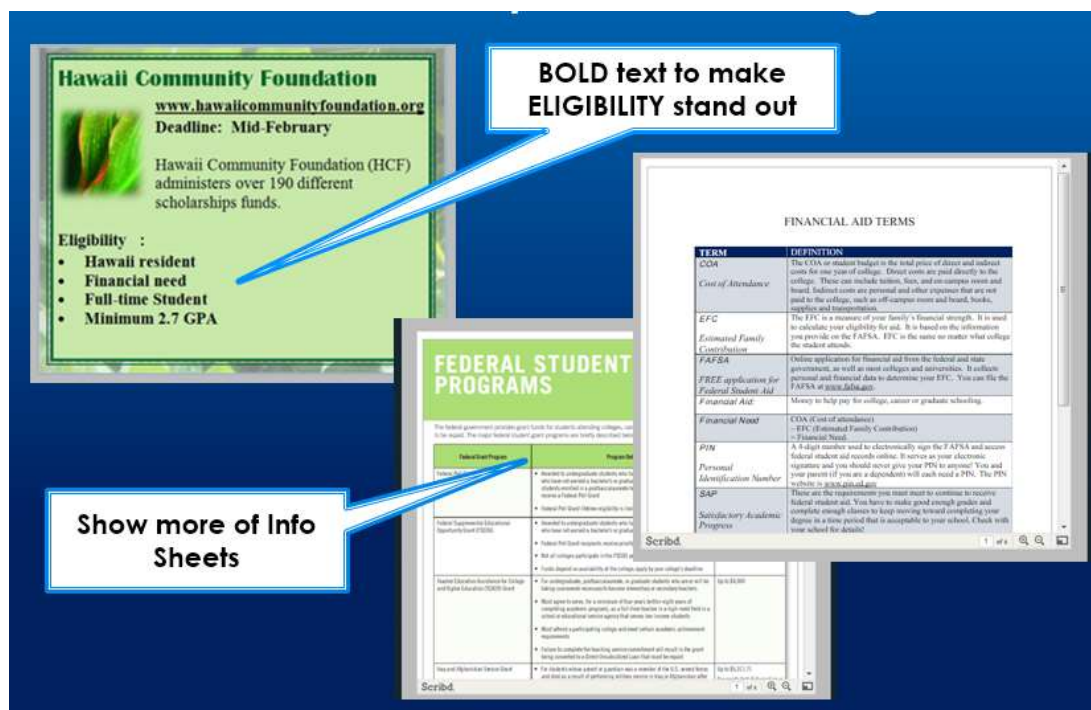
**Figure 6.** Slideshow revisions

In addition, minor tweaks based on user comments were made to the website infographics and visuals to simplify and clarify the information and improve user experience and effectiveness (Figure 7).



### Figure 7. Infographic Revisions

Bold font was added to scholarship eligibility text to make it stand out. The length of the info sheets showing on the site was increased so users would not have to scroll as much to view them (Figure 8).



### Figure 8. Layout Revisions

**Discussion and Conclusions**

Overall, feedback indicated that visually appealing graphics, clear and concise labels, and a simple clean layout was preferred by users. After revisions, the website was rated higher in both ease of use and effectiveness. Data supported how usability studies can contribute to an improvement in user satisfaction. It is well worth the time and effort to test the site on its intended users, resulting in a website that is easier to use and more effective in sharing information with the target population. The study was able to help provide a user-friendly online financial aid and scholarship resource to give students anytime, anywhere access to facilitate student awareness, guide them through the financial aid process, and ultimately, lead to increased funding for their education.

It is my hope that incorporating this technology, a web-based resource site, will enhance student learning in the area of financial aid and consequently, contribute to increased persistence in college and student success. And of course, encourage them to Kūlia I Ka Nu'u – strive for the highest!

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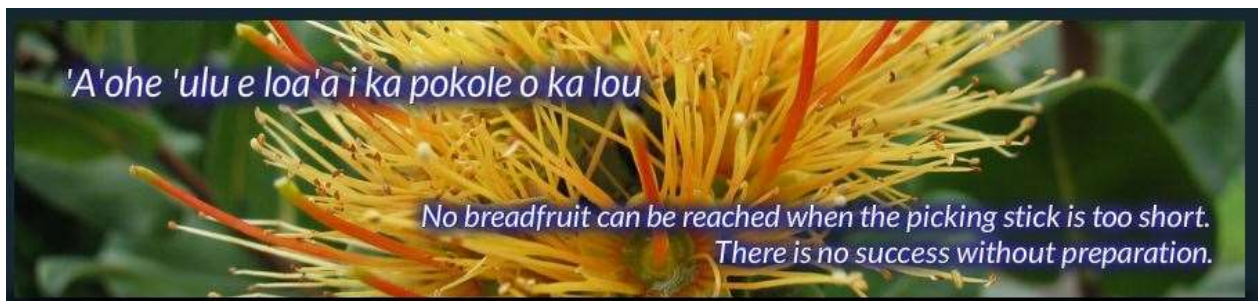
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## APPENDIX A

## Homepage/Banners

Website Prototype Screenshots: [www.finaidresources.weebly.com](http://www.finaidresources.weebly.com)



## APPENDIX B

### Created Learning Objects



Slideshow



Infographics

**FINANCIAL AID TERMS**

You may come across some unfamiliar words during the financial aid process. Here are some words that are commonly used and what they mean.

**3 ways to learn!**

1-Click image below to watch video!

Financial Aid Terms You Need to Know

**FREE APPLICATION FOR FEDERAL STUDENT AID**

**FAFSA**

- Online application for federal and state aid
- Collects personal and financial data
- Determines EFC

[www.fafsa.gov](http://www.fafsa.gov)

3

Video

## APPENDIX C

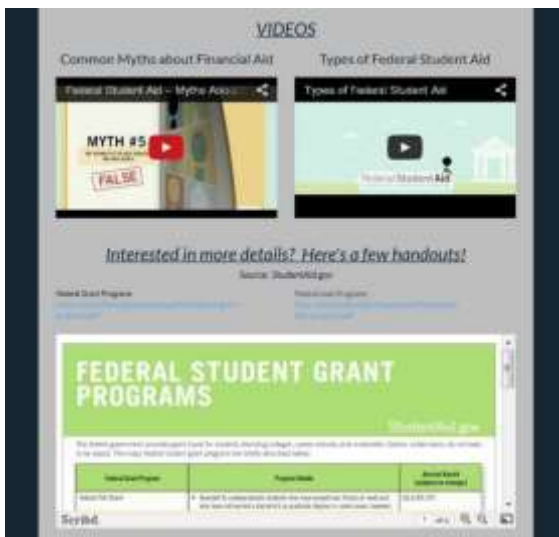
### Curated/Annotated Resources



Curated Scholarship Information  
Basic Eligibility Information  
Annotated with Links



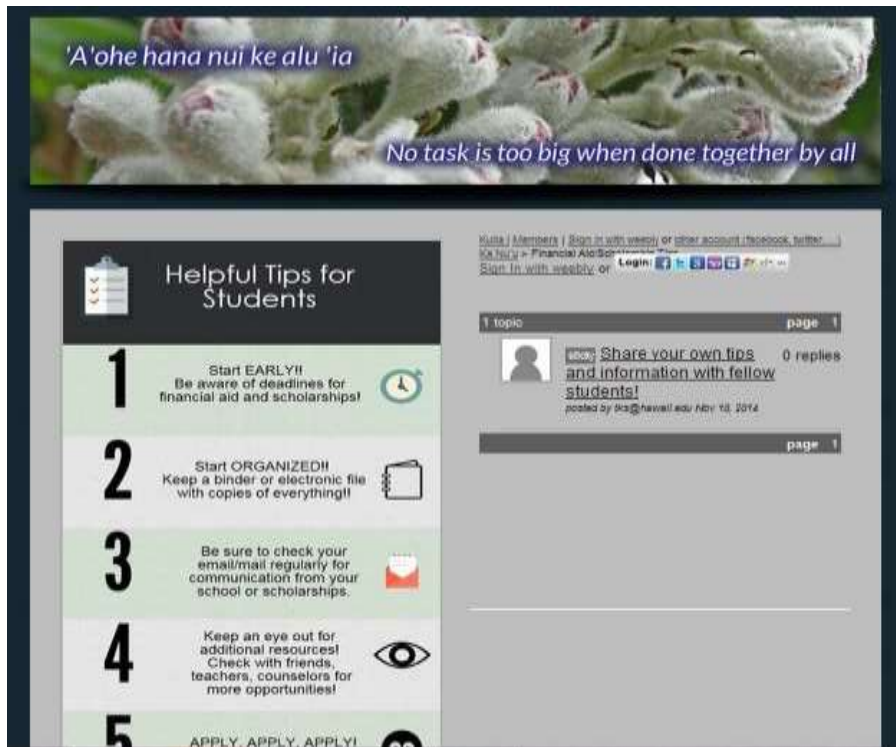
Annotated Resources/Links



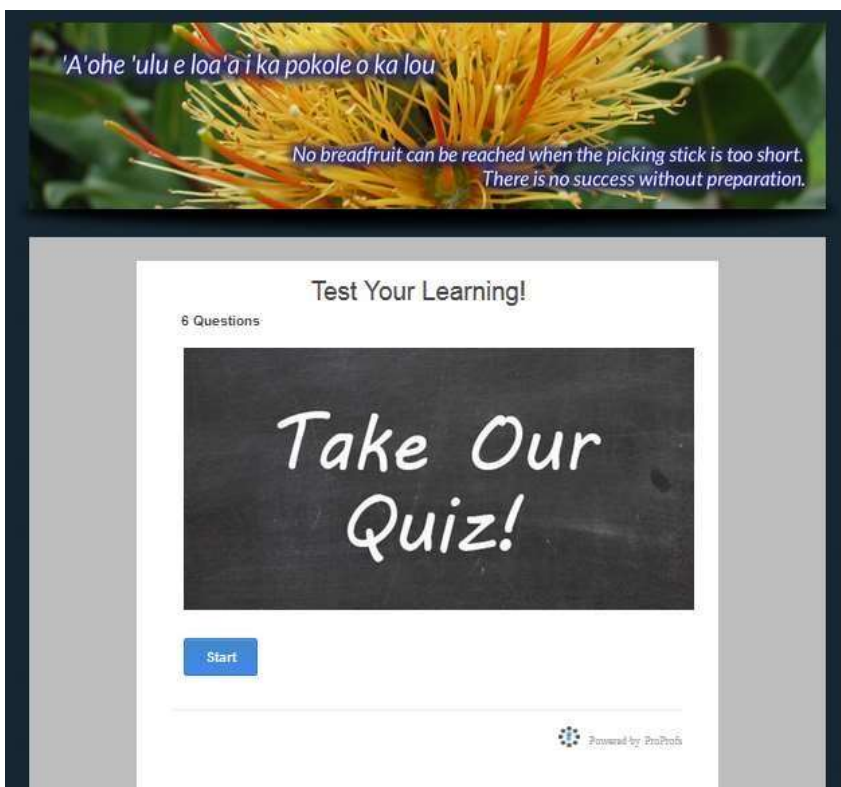
Curated Videos  
Embedded reference handouts

## APPENDIX D

### Interactive Elements



Discussion board  
for viewers to  
post own  
suggestions



Self-  
Assessment  
Quiz

**APPENDIX E**  
**Instrumentation: Recruitment Email**

To: Email Recipients  
From: Terri Saragosa [tk@hawaii.edu](mailto:tk@hawaii.edu)  
Subject: Call for Research Participants

The University of Hawai'i is conducting a study:  
***Evaluating Usability of a Financial Aid and Scholarship  
Resource Website for Native Hawaiian College  
Students***

**Are you a Native Hawaiian College Student, 18 years or  
older? Do you plan to apply for financial aid or  
scholarships next year?**

**If the answer is YES...**

Terri Saragosa would like to invite you to participate in a research study. The purpose of this usability study is develop and evaluate the ease of use and effectiveness of a website designed to inform Native Hawaiian College Students about Financial Aid and Scholarship Basics and Resources.

- Usability Studies will take place virtually online with volunteers using their own laptop/desktop computer and internet connection or at a mutually agreed public location using researcher's computer and wireless connection.
- All information will be kept strictly confidential.
- A report of the study will be available to study volunteers.

**If you may be interested in participating,  
please click on the link below to complete this short  
survey: [PRE-STUDY SURVEY](#)**

For more information,  
Please contact Terri Saragosa at [tk@hawaii.edu](mailto:tk@hawaii.edu)

**APPENDIX F**  
**Instrumentation: Pre-study Recruitment Survey**

**Aloha! Thank you for your interest. Please fill out a short survey to ensure you meet the qualifying requirements to participate in the study.**

**Are you 18 and over?**

Yes No

**Are you of Native Hawaiian Ancestry?**

Yes No

**Are you a current attending college and/or planning to attend next year?**

Yes No

**Do you currently receive any form of financial aid? (Grants, loans, scholarships)**

Yes No

**Do you plan to apply for financial aid and scholarships next year?**

Yes No

**Are you available for at a maximum of one hour from January to February to participate in the study?** If selected, we will work with you to schedule a convenient time. Yes

No

**Please select the statement that best applies to you.**

I have access to a computer and internet connection and am able to participate in the study online through Google Hangouts.

I prefer to meet with researcher in person in Hilo, Hawaii to participate in the study. None of the above.

**\*\*IF STUDENT DOES NOT MEET THE MINIMUM QUALIFICATIONS, directed to following message:** Mahalo for your interest in the study. Unfortunately, you did not meet the minimum requirements to participate. Thank you again. A hui hou!

**\*\*IF STUDENT MEETS MINIMUM QUALIFICATIONS, directed to following message:**

Mahalo for your interest in participating in the study. Please provide the following information so we may contact you regarding selection and scheduling. Your information will be kept confidential and will be only used to contact you to provide more information on this study. If you prefer not to provide this information, you may exit the survey. Thank you!

**First Name**

**Email Address**

**Phone Number (xxx) xxx-xxxx**

We will contact you soon. A hui hou!

## **Appendix G**

### **Instrumentation: Informed Consent**

#### **Informed Consent**

*University of Hawai'i* **CONSENT TO PARTICIPATE IN RESEARCH PROJECT**  
*Evaluating Usability of a Financial Aid and Scholarship Resource Website for Native Hawaiian College Students*

Aloha! My name is Terri Saragosa, and I am a student at the University of Hawaii at Mānoa. I am conducting this research project as a component for a Master's degree in Learning Design and Technology. The purpose of this usability study is to develop and evaluate the ease of use and effectiveness of a website designed to inform Native Hawaiian college students about Financial Aid and Scholarship Basics and Resources. You are being asked to participate in this research study because you are an adult Native Hawaiian college student for whom the website is being developed. Your participation in this study will help determine the changes to be implemented on the resource website to improve user experience.

#### **What activities will you do and how long will they last?**

Participation will be completely online through a Google Hangout with the researcher or using your own computer and internet connection or in-person using a provided computer and internet connection at a mutually agreed location. If you participate, you will be asked to navigate through the resource website while being prompted by a series of scenario questions. These questions are intended to evaluate the ease of use and effectiveness of the resource website. You will be asked share your thoughts out loud as you navigate the website, which will assist researchers in gaining further insights into the user experience. Your actions and verbal comments will be screen captured and recorded using BB Flashback Express Recorder. Once all scenarios are completed, the researcher may ask follow up questions as needed. You will be asked to complete an online demographic survey form prior to beginning the usability test, as well as a user satisfaction survey after participating. The user satisfaction survey is intended to gather your attitudinal feedback pertaining to the ease of use and effectiveness of the website as a whole. A short interview will be conducted after completion of the post-test survey to gain further understanding of your experience. The entire usability study, including both surveys and interview, will last about 30-45 minutes.

#### **Confidentiality and Privacy:**

The data taken from your participation in this study will be used solely for the purpose of this usability study. The data will be stored securely on a password-protected computer. When I report the results of my research project, I will not use your name or any other personal information that would identify you. The recordings from this study will be transcribed to determine commonalities from all participants. Once the research is complete, all recordings will be destroyed.

**Voluntary Participation:**

Participation in this research project is strictly voluntary. You are free to choose to participate or not to participate in this project. You may withdraw your permission or discontinue participation at any time without penalty or loss of benefits.

**Questions:**

If you have any questions regarding your participation in this research study, please contact me via email at [tkshawaii@hawaii.edu](mailto:tkshawaii@hawaii.edu)

You may also contact Faculty Advisor Catherine Fulford at [fulford@hawaii.edu](mailto:fulford@hawaii.edu). If you have any questions about your rights in this project, you can contact the University of Hawaii, Human Studies Program, by phone at (808) 956-5007 or by e-mail at [uhirb@hawaii.edu](mailto:uhirb@hawaii.edu).

**Please enter today's date**

Month Day Year

**Participant: I have read and understand the above information, and agree to participate in this usability study. I understand that I can change my mind about being in the project at any time by notifying the researcher.**

Yes No

**Audio Recording:**

**I understand that my verbal responses and screen activity will be recorded as I participate in this usability study. These audio recordings will only be accessed by the researcher and will be destroyed once the research is complete.**

Yes No

**Continuing to the next page implies your consent to audio recording and participation in the study.**

If participant does indicates no to consent and audio recording, directed to:

**You did not consent to participate in the study or to have the session audio recorded.  
Mahalo for your time!**

**APPENDIX H**  
**Instrumentation: Demographic Survey:**

To begin the study, please complete the following survey. Your information is confidential and will not be sold or given to outside entities. It is for use with this study only.

**Are you male or female?**

Male

Female

**Which category below includes your age?**

18-20

21-29

30-39

40-49

50-59

60 and older

**What type of college are you attending or planning to attend?**

2 year public

2 year private

4 year public

4 year private

Other

**What type of degree are you pursuing?**

Associate Degree

Bachelor Degree

Master's Degree

Other:

---

**What is your class standing?**

Freshmen

Sophomore

Junior

Senior

Other: \_\_\_\_\_

**Do you currently receive some form of financial aid? (Grants, loans, scholarships, work study, etc.)**

Yes

No

Not sure



**Do you plan on applying for financial aid or scholarships for the next school year?** Yes No

If you answered “NO”, why not?

**Technology**

Please rate your level of computer skill?

Extremely Poor – Excellent (6 point scale)

**Please rate your level of comfort using the internet.**

Very Uncomfortable – Very Comfortable (6 point scale)

**How often do you use the internet?**

Daily

Weekly

Occasionally

Never

**How do you usually access the internet?**

Desktop/Laptop Computer

Mobile Device (tablet, iPad, smartphone)

Other: \_\_\_\_\_

**Where do you usually access the internet?**

Home

Work

School

Other: \_\_\_\_\_

**What do you do on the internet? Check all that apply.**

Education-related

Email

Social Media

Shopping

News

Entertainment

Information Search

Other: \_\_\_\_\_

## Appendix I

### Instrumentation: Usability Test Protocol

Aloha! My name is Terri and I will be walking you through this session today. Thank you for participating with us! What college do you attend? What's your major? Etc.

Before we begin, I will be going over what you will be asked to do today. Please feel free to stop me if you have any questions. Today, we're going to do a (remote) usability study. You will be asked to explore a website to help determine whether it works as intended. As you use the website, I will be asking that you think out loud as much as possible: to say what you're looking at, what you're trying to do, and what you're thinking.

We will be using Google Hangouts and the screen sharing feature. We're also going to use a screen recorder to record your actions on the computer screen and verbal comments made during the session. In addition, you will be asked to complete a short demographic survey before we start and a short post-test survey after the session has concluded. I also may ask for additional feedback during a quick interview once the session is over.

Please remember is that we are evaluating the WEBSITE and not you. There are no right or wrong answers, so please be honest with your feedback, whether good or bad as it will help us to improve the website. The entire session should not take more than 30-45 minutes.

Any questions so far?

So before we begin, I will post a link to our (consent form and) pre-study survey in the chat box located in the bottom right hand corner of the hangout screen.


#### LINK

Please take a few moments to click on the link, read and complete the consent form and answer the short pre-test survey.

**Let me know when you are done.**

Thank you! Any questions before we begin? Okay, great!

First, please click on the link in the chat box. Now please share your screen with me.

1. Hover over the left side of the video call window, and a bar with various app icons will appear.
2. Click  **Screen share** on the left side of your screen.
3. In the window that appears, choose your desktop or choose the window you want to share.
4. Click **Start Screen share**.

Any questions? Shall I start the recorder? Great!

**[Start screen recorder]**

Before we begin, let me remind you to think aloud - I know it's not normal to think out loud while working, but doing so will help to give us insight into your experience. Some examples would be "I like this because..." This looks like it would..." I may remind you to share your thoughts as we go along. We'll be going through several tasks and scenarios throughout the session. Please feel free to stop me anytime if you have questions.

### **Task #1 Navigate Kūlia I Ka Nu'u Website Homepage**

This is the homepage of the Kūlia I Ka Nu'u website. This site is designed to provide financial aid and scholarship resources to Native Hawaiian college students.

First, I am going to ask you to scan and scroll through the page and tell me what you see. If you point your cursor to where your eye is on the page, we can follow along as you look.

Again, please try to think out loud as you go along. You can scroll around with your mouse, but please don't click on anything just yet. As you do so, please think aloud as you reflect upon the following questions:

- What do you notice first? What strikes you about it?
- What are your initial impressions about the layout of this page and what you think of the colors, graphics, photos, etc.?
- What are your thoughts of the text on this page?
- Feel free to move around the page. Without clicking on anything yet, please describe the options you see on the homepage and what you think they do.
- If you were visiting this website, what do you think you would click on first?

**When you are done exploring the homepage, please let me know.**

### **Task #2: Navigate website to locate proper link to access information on types of aid.**

**Scenario:**

**You will be attending college next year -what types of aid are available?**

- Where would click on and why?
- What are some sources to get aid for college?
- What are the types of aid available?
- What kind of aid does the federal government provide?

**When you feel you have completed this task, please let me know.**

**Task #3: Navigate website to find information on federal financial aid application process.****Scenario:**

**You are interested in applying for Federal Financial Aid? Find information on how you would do that.**

- Where would click on and why?
- How would you apply for federal financial aid?
- Are the steps helpful in explaining what you need to do? □ When is the deadline to apply?

**When you feel you have completed this task, please let me know.**

**Task #4: Navigate website to find basic financial aid terms that are important to know.**

**Scenario: Your friend is new to college. What are the basic financial aid terms she should know?**

- Where would click on and why?
- Are you able to find the information for your friend?
- Are the terms explained clearly?
- What are some terms that are important for her to know?

**When you feel you have completed this task, please let me know.**

You're doing great! We're on our last scenario. Any questions before we continue?

**Task #5: Navigate website to find scholarship information.**

**Scenario: You want to find at least 3 scholarships you can apply for.**

- Where would click on and why?
- What are 3 scholarships you can apply for?
- For each scholarship:
  - What is the eligibility?
  - When is the deadline?
  - Where would you go for more information?

**When you feel you have completed this task, please let me know.**

That was the last scenario for our session. I have posted the link to our post-test survey. We have a post-test survey for you to complete. I will post the link in the chat box in the bottom right hand corner.

**LINK**

Please take a few moments to click on the link and answer the survey.

Please let me know when you are done.

*[Pause screen recorder till participant returns]*

Mahalo!

[Interview]

So I have just a few questions before we end today.

[Follow up on observations as needed]

What did you like best about the site?

What did you like least about the site?

What was your overall impression about navigating the website? Easy or difficult?  
Why? Can you give me some examples?

Do you have any suggestions to improve the website? Do you have any other comments?

I just want to say thank you very much for your time today. If you do have any questions about the study moving forward, please feel free to email me.

If you don't have any more questions right now, I'm going to go ahead and conclude our research today. Mahalo!

*[Stop screen recorder and save the file.]*

## **Appendix J**

### **Instrumentation: Post-Study User Survey**

Please complete this survey based on your experience with this usability study. It is designed to gather information on overall satisfaction and feedback on the website. Please rate each statement based on the scale provided.

#### **DESIGN LAYOUT**

- 1-Strongly Agree
- 2-Disagree
- 3-Somewhat Disagree
- 4-Somewhat Agree
- 5-Agree
- 6-Strongly Agree

The home page layout is easy to understand.  
The text is clearly written.  
The images are interesting.  
The website is visually appealing.  
The organization of the site is logical and easy to follow.

#### **NAVIGATION**

- 1-Strongly Agree
  - 2-Disagree
  - 3-Somewhat Disagree
  - 4-Somewhat Agree
  - 5-Agree
  - 6-Strongly Agree
- The website was easy to navigate.  
Number of buttons/links is reasonable.  
Labels are clear and concise.  
Links are consistent and easy to identify.

#### **EASE OF USE**

- 1-Strongly Agree
  - 2-Disagree
  - 3-Somewhat Disagree
  - 4-Somewhat Agree
  - 5-Agree
  - 6-Strongly Agree
- The website is easy to use.  
I can use the website without instructions.  
The website is user-friendly.

The website has a clean and simple presentation.

**EFFECTIVENESS**

1-Strongly Agree

2-Disagree

3-Somewhat Disagree

4-Somewhat Agree

5-Agree

6-Strongly Agree

The information on the website is useful.

It was easy to find information on the website.

I was able to complete the tasks in the study easily.

The website is effective in providing financial aid basics and scholarship resources.

**OVERALL EXPERIENCE****Layout**

Very Confusing – Very Clear

**Navigation**

Very Difficult – Very Easy

**Ease of Use**

Very Difficult – Very Easy

**Effectiveness of website**

Not at all effective – Very Effective

**COMMENTS**

Were there any features that were confusing for you?

Do you have any suggestion to improve the website?

**Mahalo!**

Your feedback is crucial to help us improve the site. Please return to your moderator to complete the study.